Claims 1-42 (Cancelled)

43. (Newly Presented) A communication method, comprising:

(a) providing a representation of an information pattern having a plurality of degrees of freedom;

(b) imposing the information pattern as a set of time domain parameters on a signal, having at least as many time domain parameters as degrees of freedom, to produce an information communication signal;

(c) transmitting the information communication signal;

(d) receiving the information communication signal; and

(e) demodulating the received information communication signal to determine the set of time domain parameters from a set of respective baseband phase-amplitude responses.

44. (Newly Presented) The communication method according to claim 43, wherein the information communication signal is within a communication band, the communication band being separated into a plurality of frequency subbands, each subband being analyzed separately.

45. (Newly Presented) The communication method of claim 44, wherein the demodulating step determines a phase-amplitude response for each respective subband.

46. (Newly Presented) The communication method of claim 44, wherein information is communicated over at least two subbands simultaneously.

47. (Newly Presented) The communication method of claim 44, wherein a number of time domain parameters is less than or equal to a number of frequency subbands.

48. (Newly Presented) The communication method according to claim 43, wherein the set of time domain parameters comprises an acoustic reflection pattern.

49. (Newly Presented) The communication method according to claim 43, wherein the set of time domain parameters comprises a set of phase shifts.

50. (Newly Presented) The communication method according to claim 44, wherein the set communication band comprises a frequency band having a center frequency in the range of between about 300 MHz to about 30 GHz.

51. (Newly Presented) The communication method according to claim 44, wherein the set communication band comprises a frequency in a band between about 800 MHz and 1.3 GHz and having a bandwidth of between about 1-3%.

52. (Newly Presented) The communication method according to claim 44, wherein the subbands are generated simultaneously.

53. (Newly Presented) The communication method according to claim 44, wherein the subbands are about evenly spaced across the communication band.

54. (Newly Presented) The communication method according to claim 43, wherein the demodulator homodynes received information communication signal with a demodulation signal to produce, in a steady state condition, a signal whose amplitude corresponds to a relative phase-amplitude difference between said information communication signal and said demodulation signal.

54. (Newly Presented) The communication method according to claim 43, wherein the demodulator comprises a double balanced mixer.

55. (Newly Presented) The communication method according to claim 43, wherein the phase amplitude response is detected by a low pass filter.

56. (Newly Presented) The communication method according to claim 43, wherein the phase amplitude response is detected by a low pass filter having at least two poles in its transfer function.

57. (Newly Presented) The communication method according to claim 43, wherein the phase amplitude response is represented as a scalar value.

58. (Newly Presented) The communication method according to claim 43, wherein time domain parameters include a maximum significant time constant of less than about 5 μS and comprises a pattern selected from a signal perturbation space having about 16 degrees of freedom.

59. (Newly Presented) The communication method according to claim 43, wherein the demodulator determines self-consistency of received data.

60. (Newly Presented) A communication system, comprising:

(a) an input receiving a representation of an information pattern having a plurality of degrees of freedom;

(b) a modulator for modulating the information pattern as a set of time domain parameters on a signal, having at least as many time domain parameters as degrees of freedom, to produce an information communication signal;

(c) a demodulator for demodulating the received information communication signal to determine the set of time domain parameters from a set of respective demodulated baseband phase-amplitude responses; and

(d) an analyzer for regenerating the information pattern.